

WHAT IS CLAIMED IS:

Sub. C2

1. A pressure measuring system for a refrigeration system, comprising:

5

conversion means for converting a pressure being measured into a digital signal representing said measured pressure;

10

processing means for calculating a corresponding boiling point temperature for a selected refrigerant at said measured pressure;

15

refrigerant selection means for selectively inputting into said processing means the boiling point temperature-pressure relationship or coefficient of said selected refrigerant; and

20

display means for displaying said measured pressure and the calculated boiling point temperature.

2. The pressure measuring system according to claim 1, wherein said refrigerant selection means comprises a memory for storing the boiling point temperature-pressure relationship of a plurality of different refrigerants.

25

3. The pressure measuring system according to claim 1, wherein said refrigerant selection means comprises an interface for receiving a plug-in memory chip containing the boiling point temperature-pressure relationship of a particular refrigerant.

30

4. The pressure measuring system according to claim 1, wherein said processing means further comprises means for continuously performing successive calculations

35

NP
NK

13

CC4

as said measured pressure varies with time and update means for updating the pressure and boiling point temperature values displayed by said display means at predetermined intervals and control means for selectively determining the length of said predetermined time intervals.

5

sub. 93

5. The pressure measuring system according to claim 4, wherein the length of said predetermined time intervals is selectable from the group of intervals consisting of one-second and five-second intervals.

10

6. The pressure measuring system according to claim 4, further comprising secondary control means for activating said display means to indicate the direction of a pressure change, upward or downward, during said predetermined time intervals in between said updating of the pressure and temperature values.

15

7. The pressure measuring system according to claim 1, wherein said conversion means comprises a transducer for converting said measured pressure into an analog electric signal and an analog-digital converter for converting the analog signal to a digital signal for inputting into said processing means.

20

25

8. The pressure measuring system according to claim 7, comprising a pair of said transducers for connection to the high and low pressure sides of a refrigeration system, respectively.

30

9. A refrigeration system, including a pressure measuring system according to any one of claims 1 to 8.

35

15